

CLAIMS

What is claimed is:

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1. An apparatus for encoding a mark into digital data, comprising:
means for locating in the digital data, using a predetermined pattern, at least two
values that represents a flat area; and
means for modifying the values in the flat area to encode a mark into the flat area;
10 wherein the means for locating in the digital data further comprises:
means for calculating a variability for a selected portion of the digital data using
the predetermined pattern; and
means for representing the flat area when the variability is less than a
predetermined amount;
15 wherein the apparatus for encoding is part of a device receiving an unencoded
data to create the digital data; and
wherein the apparatus for encoding is part of the device using the values in the
flat area to create an encoded data.

20 2. The apparatus of claim 115, wherein the predetermined pattern is a regular
pattern.

3. The apparatus of claim 115, wherein the predetermined pattern is an irregular
pattern.

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4. The apparatus of claim 115, wherein the predetermined pattern identifies a
consecutive set of values.

5. The apparatus of claim 115, wherein the means for modifying the values further comprises:

means for modifying the values according to a recognizable amount.

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6. The apparatus of Claim 119, wherein the means for modifying the values further comprises:

means for adding the recognizable amount to the values.

10 7. The apparatus of claim 119, wherein the means for modifying the values further comprises:

means for subtracting the recognizable amount from the values.

8. The apparatus of claim 119, further comprising the means for computing the
15 recognizable amount includes:

a means for calculating a function of the variability in the flat area.

9. The apparatus of claim 122, wherein the means for computing the recognizable amount further comprises:

20 means for computing the recognizable amount as a multiple of the variability in the flat area.

10. The apparatus of claim 119, further comprising:

25 means for modifying the values in the flat area to provide at least one known peak in the flat area.

11. The apparatus of claim 115, wherein the means for modifying the values further comprises:

means for modifying at least two of the values in the digital data to represent a single mark value in the flat area.

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12. The apparatus of claim 115, further comprising:

means for locating in the digital data, using a predetermined pattern, at least two values that represents a second flat area; and

means for modifying the values in the second flat area to encode the mark into the second flat area.

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13. The apparatus of claim 115, further comprising:

means for converting the format of the digital data.

14. The apparatus of Claim 115, at least one of the means is implemented using a computer accessing a memory.

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15. The apparatus of Claim 115, wherein the device is included in a computer receiving the unencoded data.

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16. The apparatus of Claim 115, wherein the device communicates with a processor within a computer to create the encoded data within the computer.

17. The apparatus of claim 115, wherein the predetermined pattern is one dimensional.

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18. The apparatus of claim 115, wherein the predetermined pattern is two dimensional.
19. The method of claim 115, wherein the predetermined pattern is three dimensional.

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